DO NOT REMOVE CARBONS

Form Approved OMB No. 2120-000

US Department of Transportation
Federal Aviation Administration

NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION

Aeronautical Study Number

1. Nature of Proposal

A. Type	B. Class	C. Work Schedule Dates
☒ New Construction	☒ Permanent	Beginning FCC Approval
☐ Alteration	☐ Temporary (Duration _____ months)	End 12 Months

2. Complete Description of Structure

A. Include effective radiated power and assigned frequency of all existing, proposed or modified AM, FM, or TV broadcast stations utilizing this structure.

B. Include size and configuration of power transmission lines and their supporting towers in the vicinity of FAA facilities and public airports.

C. Include information showing site orientation, dimensions, and construction materials of the proposed structure.

FM Broadcast Facility
99.1 mHz - 41 KW ERP
5500 Feet AMSL

(if more space is required, continue on a separate sheet.)

3A. Name and address of individual, company, corporation, etc. proposing the construction or alteration. *(Number, Street, City, State and Zip Code)*

(912) 638-5608
area code Telephone Number

KES Communications, Inc.
1148 South Citrus Avenue
Los Angeles, CA 90019

B. Name, address and telephone number of proponent's representative if different than 3 above.

Bromo Communications, Inc.
P.O. Box M
St. Simons Island, GA 31522
(912) 638-5608

4. Location of Structure

A. Coordinates *(To nearest second)*	B. Nearest City or Town, and State	C. Name of nearest airport, heliport, flightpark, or seaplane base
	Palani Junction	Ke-Ahole
19° 43' 16" Latitude	(1) Distance to 4B 4 (Statute) Miles	(1) Distance from structure to nearest point of nearest runway 7 NM
155° 55' 26" Longitude	(2) Direction to 4B 240 Degrees (T)	(2) Direction from structure to airport 275 Degrees (T)

5. Height and Elevation *(Complete to the nearest foot)*

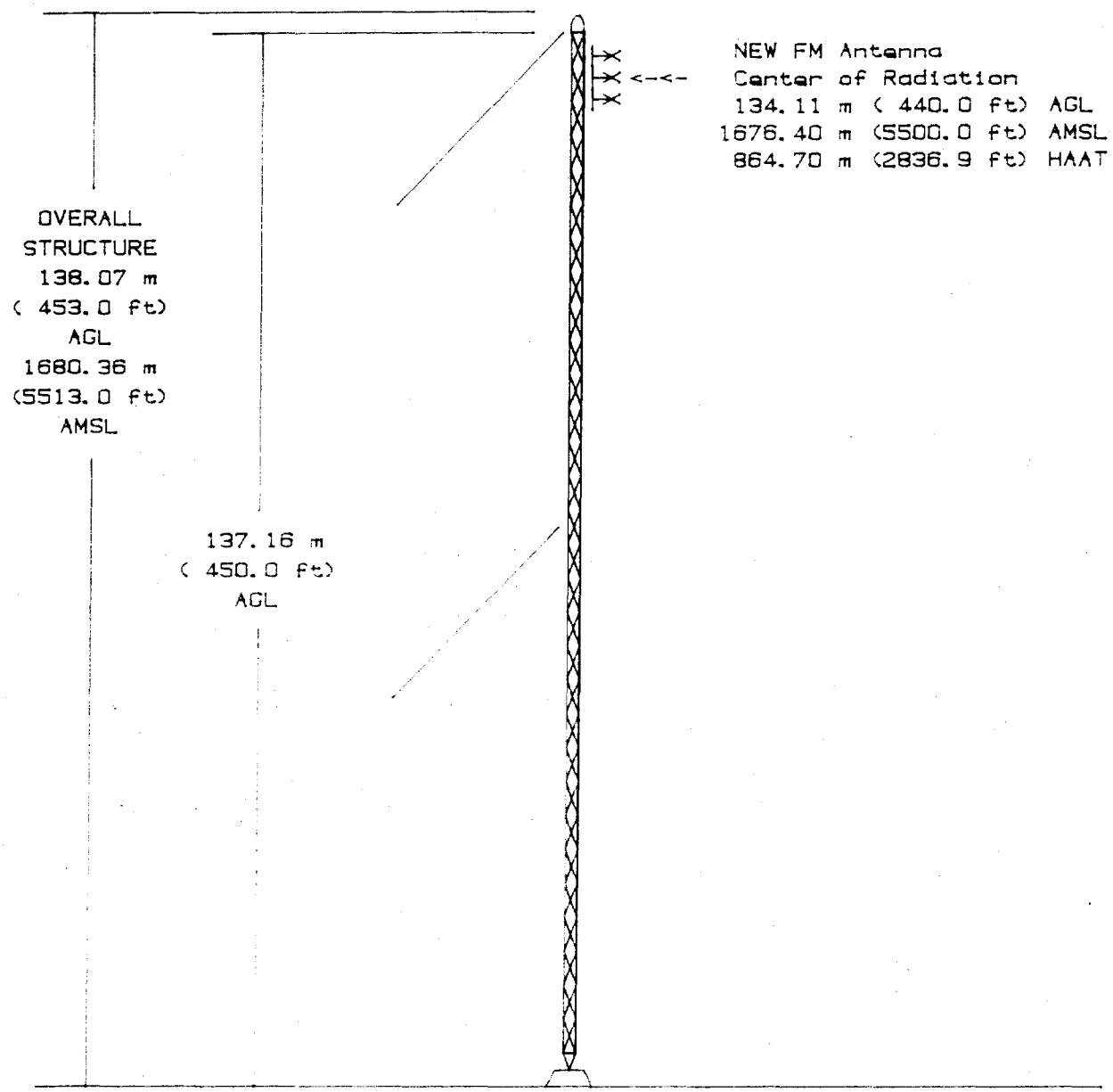
A. Elevation of site above mean sea level	5060
B. Height of Structure including all appurtenances and lighting *(if any)* above ground, or water if so situated	453
C. Overall height above mean sea level *(A + B)*	5513

D. Description of location of site with respect to highways, streets, airports, prominent terrain features, existing structures, etc. Attach a U.S. Geological Survey quadrangle map or equivalent showing the relationship of construction site to nearest airport(s). *(if more space is required, continue on a separate sheet of paper and attach to this notice.)*

End of Kaloko Drive, near crest of Hinakapoula, Kailua Kona, Hawaii.
See attached portion of Kailua 7.5 topographic map for site details.

Notice is required by Part 77 of the Federal Aviation Regulations (14 C.F.R. Part 77) pursuant to Section 1101 of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1101). Persons who knowingly and willingly violate the Notice requirements of Part 77 are subject to a fine (criminal penalty) of not more than $500 for the first offense and not more than $2,000 for subsequent offenses, pursuant to Section 902(a) of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1472(a)).

I HEREBY CERTIFY that all of the above statements made by me are true, complete, and correct to the best of my knowledge. In addition, I agree to obstruction mark and/or light the structure in accordance with established marking & lighting standards if necessary.



VERTICAL PLAN SKETCH

SITE ELEVATION - 1542 m (5060 ft) AMSL

TOP OF STRUCTURE - 138 m (453 ft) AGL
1680 m (5513 ft) AMSL

FM Antenna COR - 134 m (440 ft) AGL
1676 m (5500 ft) AMSL
865 m (2837 ft) HAAT

NOTE: NOT DRAWN TO SCALE

EXHIBIT #2

NEW FM APPLICATION
KES COMMUNICATIONS, INC.
CH 256C - 99.1 MHZ - 41 KW
WAIMEA, HAWAII

OCTOBER 1991

BROMO COMMUNICATIONS
BROADCAST TECHNICAL CONSULTANTS
St Simons Island, Georgia Washington, D.C.

CLEARANCE STUDY FOR NEW FM STATION WAIMEA, HAWAII
USING PROPOSED SITE AS REFERENCE

REFERENCE
19 43 16 N
155 55 26 W

CLASS C
Current rules spacings
CHANNEL 256 - 99.1 MHz

DISPLAY DATES
DATA 08-28-91
SEARCH 09-30-91

CALL TYPE	CH# CITY LAT LNG	STATE PWR	BEAR' HT	D-KM D-Mi	R-KM R-Mi	MARGIN (KM)
ALOPEN	256C Waimea	HI	38.5	42.74	290.0	-247.26 *
AL N	20 01 24 155 40 12	0.000 kW	0M	26.6	180.2	
	82-483	WO= 850613				850712
KHHH.C	253C1 Honolulu	HI	310.9	267.00	105.0	162.00
CP CN	21 17 59 157 51 33	100.000 kW	-85M	165.9	65.3	
	KHVH, Inc.			BPH870114JW		
KAGB.C	258C1 Honolulu	HI	310.8	267.50	105.0	162.50

NEW FM APPLICATION
KES COMMUNICATIONS, INC.
CH 256C - 99.1 MHZ - 41 KW
WAIMEA, HAWAII
October 1991

EXHIBIT #4

Facilities Within Study

There are no proposed or authorized FM or Television transmitters, or any non-broadcast radio stations within 60 meters of this proposal. There are no known established commercial or government receiving stations, cable head-end facilities or populated areas within the blanketing contour of this proposal. See Exhibit #4A for a detailed blanketing contour calculation and statement.

There are several authorized or proposed FM or TV transmitters within 10 kilometers of this proposal. A complete list of these facilities/proposals in attached as Exhibit #4B. Although it is the experience of Bromo Communications, Inc. that none of the stations listed on Exhibit #4B will be subject to any receiver-induced intermodulation interference as a result of the granting and subsequent operation of this proposal, KES Communications, Inc. ("KES") will use sound engineering to remedy the situation to the Commission's satisfaction. KES will also follow the guidelines of §73.318 of the Commission's rules and regulations. There are no AM stations within 3.2 kilometers (2.0 miles) of this proposal.

FM BLANKETING CONTOUR CALCULATION

The blanketing contour of New FM is determined using the following formula as defined in 73.318 of the Commission's Rules:

D=0.394 * SQR(P)
where D= distance to blanketing contour in km
P=ERP in kW of the station

The ERP of New FM is 41 kW yielding a blanketing contour 2.52 km from the tower.

While it is the experience of this firm that very little, if any, blanketing interference will be experienced by the grant of this proposal, New FM will follow the guidelines of 73.318 and good engineering practice to satisfy blanketing complaints.

FM BLANKETING STATEMENT

EXHIBIT #4A
NEW FM APPLICATION
KES COMMUNICATIONS, INC.
CH 256C - 99.1 MHZ - 41 KW
WAIMEA, HAWAII

OCTOBER 1991

BROMO COMMUNICATIONS
BROADCAST TECHNICAL CONSULTANTS
St Simons Island, Georgia Washington, D.C.

AM STATIONS WITHIN 5 KM

FREQ	KM	MI	BEARING	LAT / LONG	STATUS	CL	PWR	FIELD	CALL	CO	ST	CITY
NONE												

FM STATIONS WITHIN 12 KM

CHANNEL	KM	MI	BEARING	LAT / LONG	STATUS	PWR	CALL	ST	CITY
221D	3.58	(2.23)	357.2	19:45:12/155:55:32	LI	0.07	KOAS-1	HI	Kealakekua, etc.
229C1	0.29	(0.18)	96.1	19:43:15/155:55:16	LI	6.60	KLUA	HI	Kailua Kona
230C	0.29	(0.18)	96.1	19:43:15/155:55:16	CP	40.00	KLUA.C	HI	Kailua Kona
288D	0.98	(0.61)	129.3	19:42:56/155:55: 0	LI	0.01	K288CS	HI	Kawaihae

TV STATIONS WITHIN 12 KM

CHANNEL	KM	MI	BEARING	LAT / LONG	STATUS	PWR	CALL	ST	CITY
06Z	0.98	(0.61)	129.3	19:42:56/155:55: 0	LI	52.500	KVHF	HI	KAILUA KONA
36N	4.07	(2.53)	304.1	19:44:30/155:57:22	CP	2.800	K36CT	HI	KAILUA KONA
50N	11.57	(7.19)	212.5	19:37:60/155:59: 0	CP	2.200	K50CS	HI	KAILUA KONA
52N	4.07	(2.53)	304.1	19:44:30/155:57:22	CP	2.770	K52DQ	HI	KAILUA KONA
55N	11.57	(7.19)	212.5	19:37:60/155:59: 0	CP	2.150	K55GA	HI	KAILUA KONA
58N	11.57	(7.19)	212.5	19:37:60/155:59: 0	CP	2.110	K58DN	HI	KAILUA KONA
60N	11.57	(7.19)	212.5	19:37:60/155:59: 0	AP	2.110	AP841	HI	KAILUA KONA
66N	11.57	(7.19)	212.5	19:37:60/155:59: 0	CP	2.060	K66DV	HI	KAILUA KONA

FACILITIES WITHIN 10 KM

EXHIBIT #4B
NEW FM APPLICATION
KES COMMUNICATIONS, INC.
CH 256C - 99.1 MHZ - 41 KW
WAIMEA, HAWAII

OCTOBER 1991

BROMO COMMUNICATIONS
BROADCAST TECHNICAL CONSULTANTS
St Simons Island, Georgia Washington, D.C.

NEW FM APPLICATION
KES COMMUNICATIONS, INC.
CH 256C - 99.1 MHZ - 41 KW
WAIMEA, HAWAII
October 1991

EXHIBIT #7

Radiofrequency Radiation Study and Statement

This radiofrequency radiation study is being conducted to determine whether this proposal is in compliance with OST Bulletin Number 65, dated October 1985, regarding human exposure to radiofrequency radiation in the vicinity of broadcast towers. This study considers all nearby contributing stations and utilizes the appropriate formula's contained in the OST Bulletin.

The New FM three bay antenna system will be mounted with it's center of radiation 134.11 meters (440.0 feet) above the ground at the proposed tower location and operate with an effective radiated power of 41.0 kilowatts of horizontal and vertical power. At two meters, the height of an average person, above the ground at the base of the proposed tower, the antenna system will contribute, worst case, 0.1570 MW or 15.7% of the allowable ANSI limit. Since this level is below the 100% limit defined in the aforementioned bulletin, this proposal is believed to be in compliance with OST Bulletin Number 65 as is required by the Federal Communications Commission.

KES Communications, Inc. ("KES") notes that there is another Class C FM station, KLUA, near the proposed KES site, at a distance of 289.6 meters (950.4 feet). The contribution of the KLUA antenna system at the base of the proposed New FM antenna system would not cause the radiofrequency radiation level to exceed 100% in the vicinity of the New FM tower.

Further, KES will post warning signs in the vicinity of the tower warning of potential radiofrequency radiation hazards at the site. KES also will reduce power of the proposed facility or discontinue operation should anyone be required to climb the tower for maintenance or inspection

AFFIDAVIT AND QUALIFICATIONS OF CONSULTANT

State of Georgia)
St. Simons Island) ss:
County of Glynn)

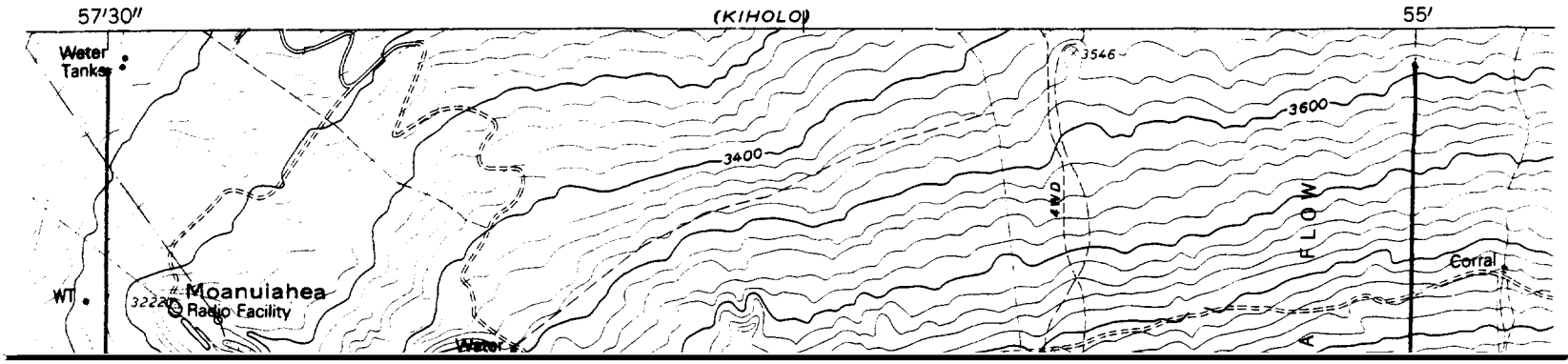
KAILUA QUADRANGLE

HAWAII–HAWAII CO

ISLAND OF HAWAII–NORTH KONA DISTRICT

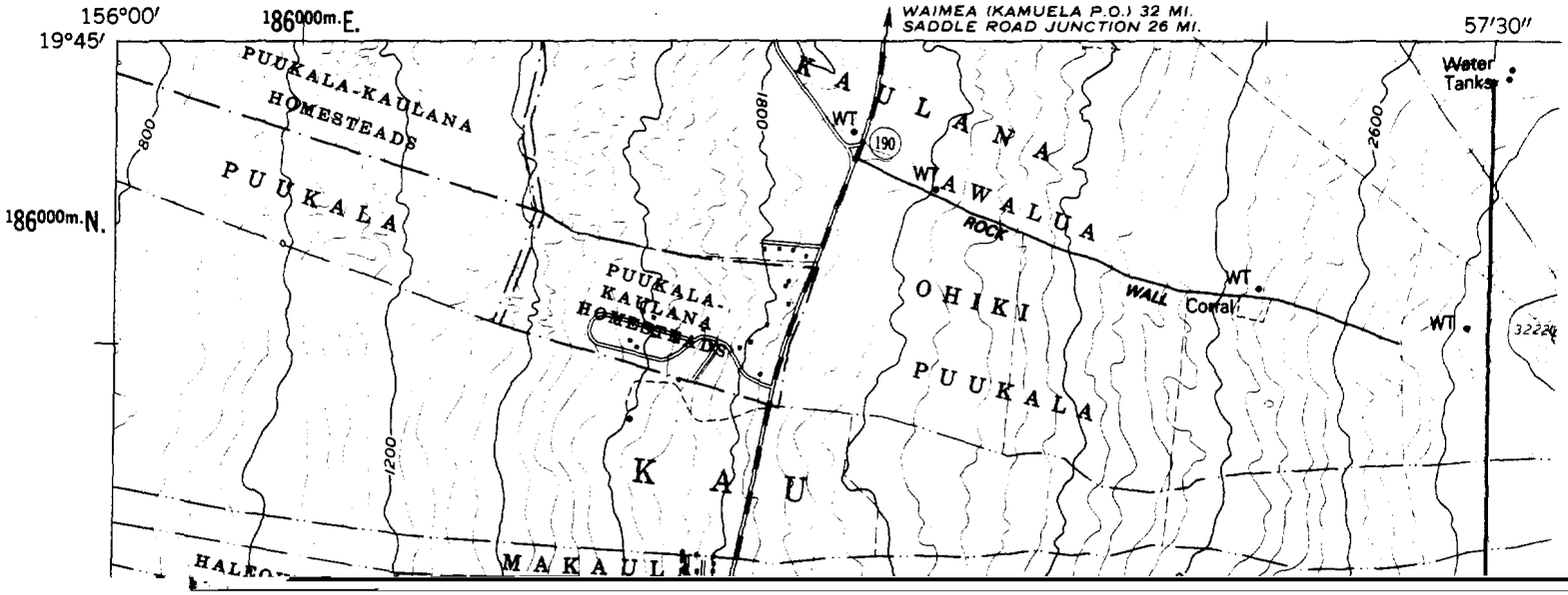
7.5 MINUTE SERIES (TOPOGRAPHIC)

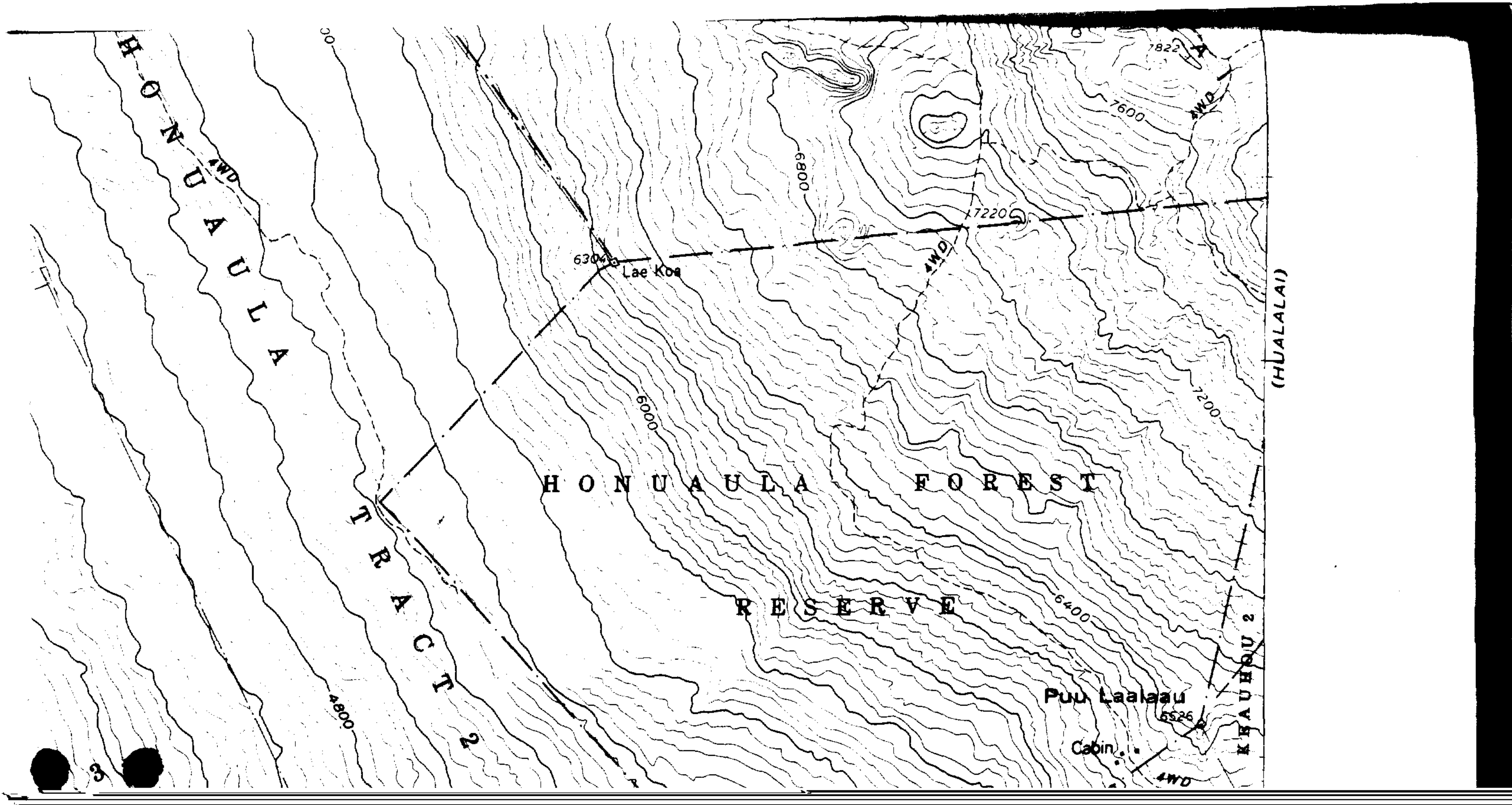
(PUU ANAHULU)

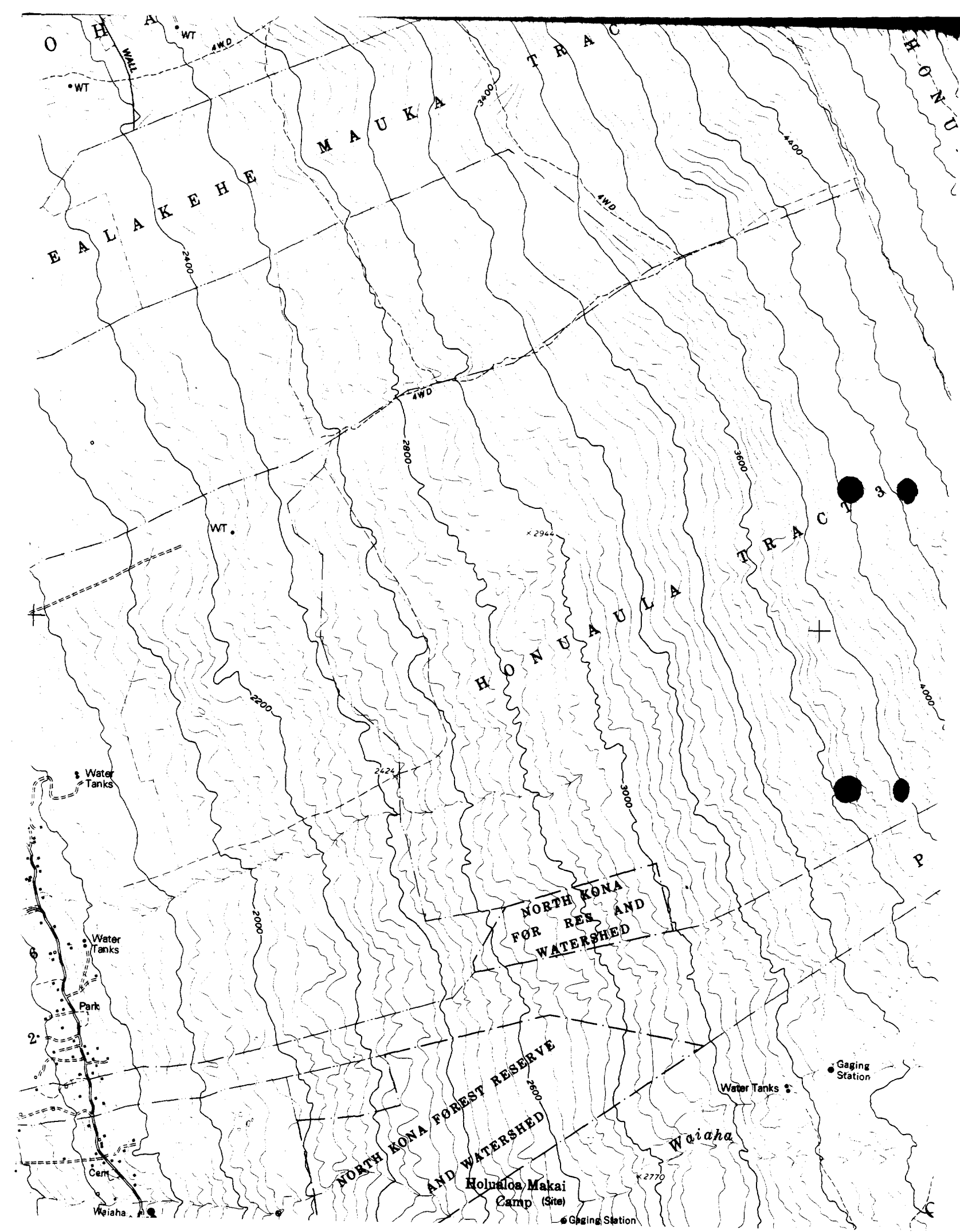

57'30"
(KIHOLO)
55'
Water Tanks
3546
3600
3400
END
LOW
Corral
WT
Moanuiahea
Radio Facility
Water

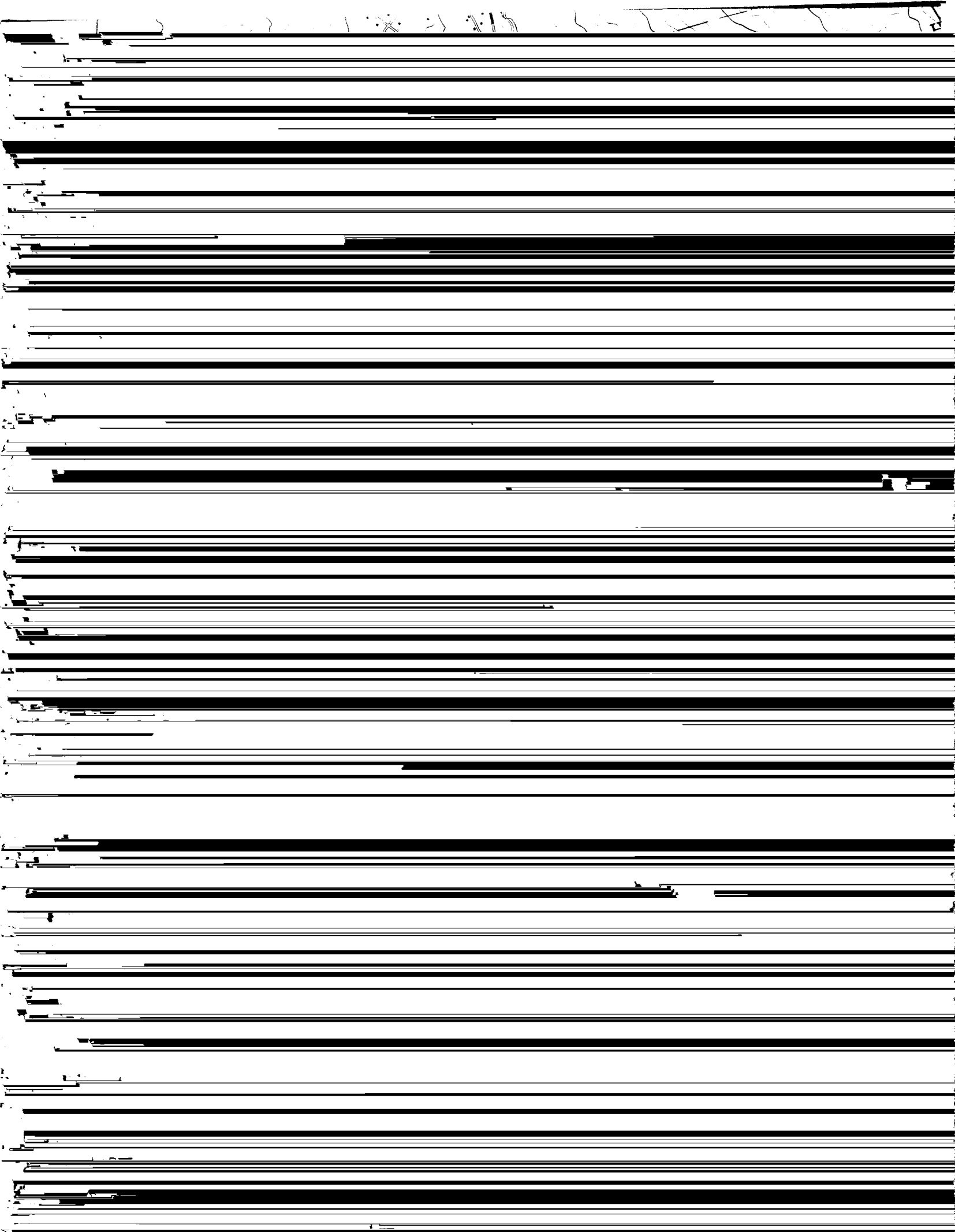
MAKALAWENA)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY




HONUAULA
TRACT 2
HONUAULA FOREST
RESERVE
Lae Koa
6304
7220
6800
6000
6400
7600
7200
4800
4WD
(HUALALAI)
KEAUHOU 2
Puu Laalaau
5526
Cabin
3


WT
4WD
WALL
MAUKA TRAC
EALAKEHE
3400
4400
2400
2800
3600
2944
HONUAULA TRAC
2200
2424
3000
4000
Water Tanks
NORTH KONA FOR RES AND WATERSHED
2000
Park
NORTH KONA FOREST RESERVE AND WATERSHED
2600
Gaging Station
Waiaha
2770
Holualoa Makai Camp (Site)
Cem
Waiaha



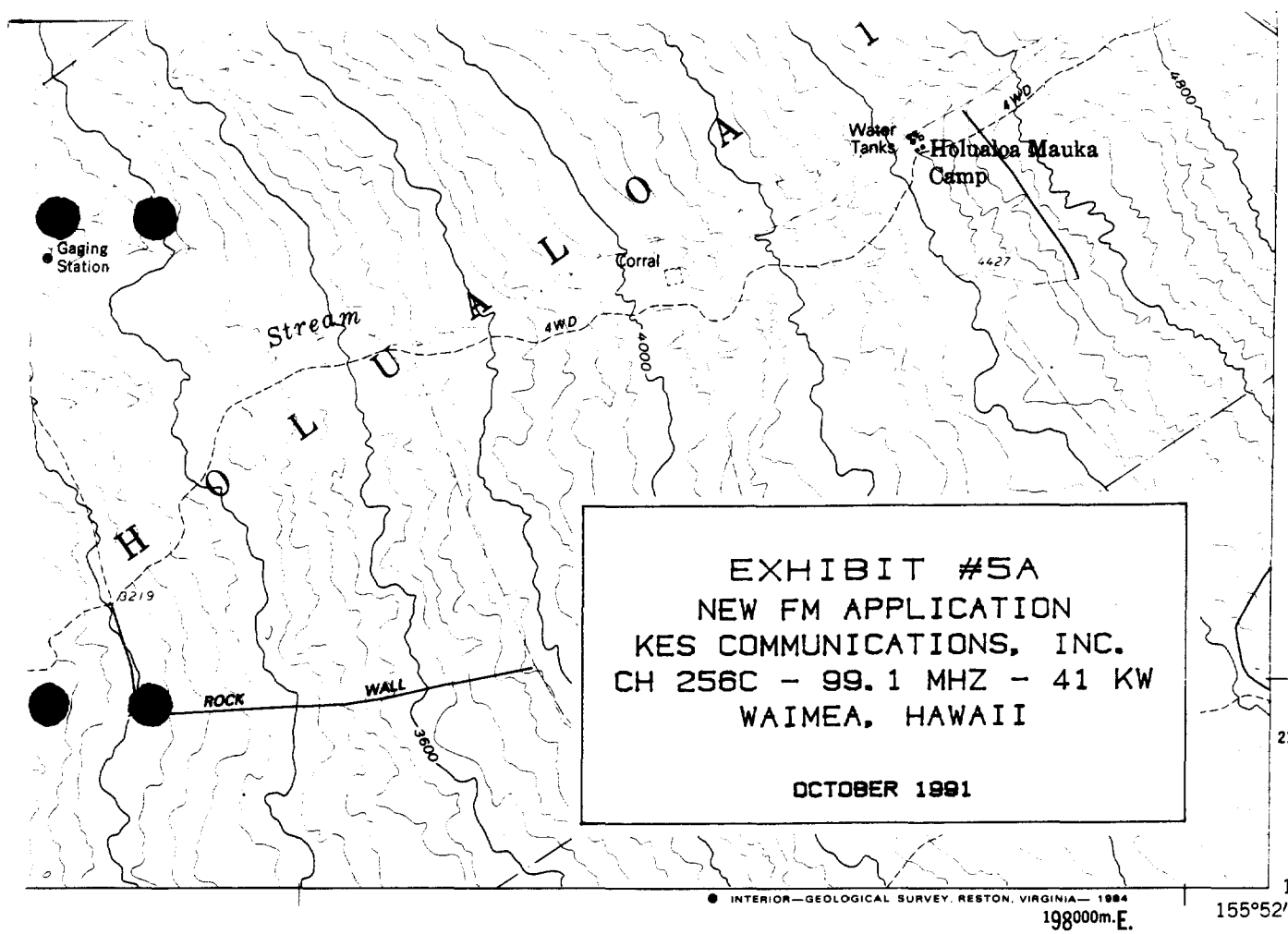


EXHIBIT #5A
NEW FM APPLICATION
KES COMMUNICATIONS, INC.
CH 256C - 99.1 MHZ - 41 KW
WAIMEA, HAWAII

OCTOBER 1991

2173000m.N.

19°37'30"

155°52'30"

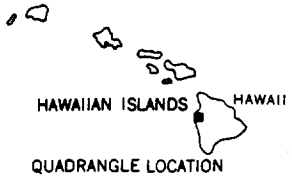
(PUU LEHUA)

198000m.E.

● INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA— 1984

ROAD CLASSIFICATION

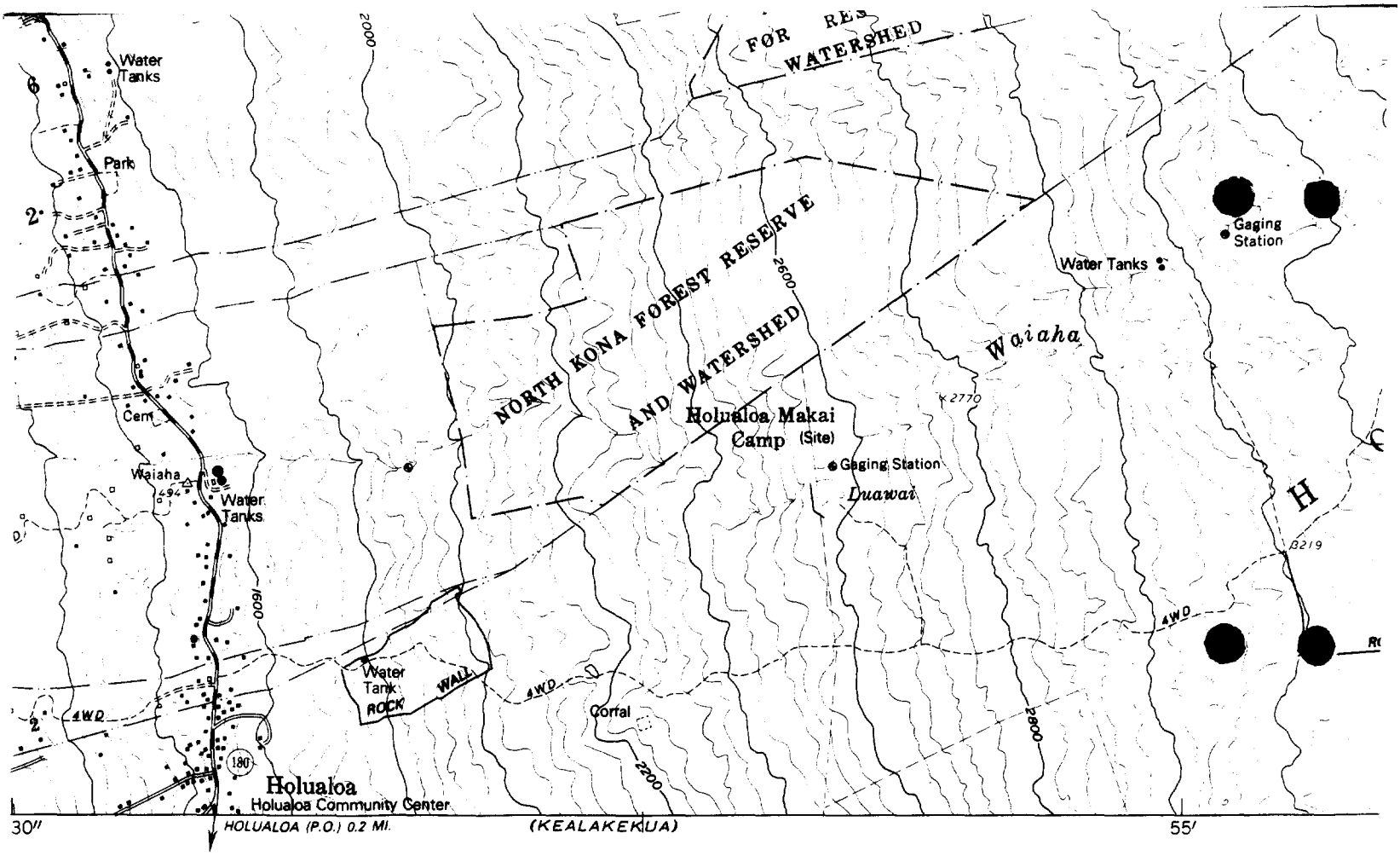
Primary highway, hard surface	Light-duty road, hard or improved surface
Secondary highway, hard surface	Unimproved road
◯ State Route	



QUADRANGLE LOCATION

KAILUA, HAWAII
N1937.5—W15552.5/7.5

1982



SCALE 1:24 000

1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 40 FEET

DATUM IS MEAN SEA LEVEL

DEPTH CURVES IN FEET—DATUM IS MEAN LOWER LOW WATER

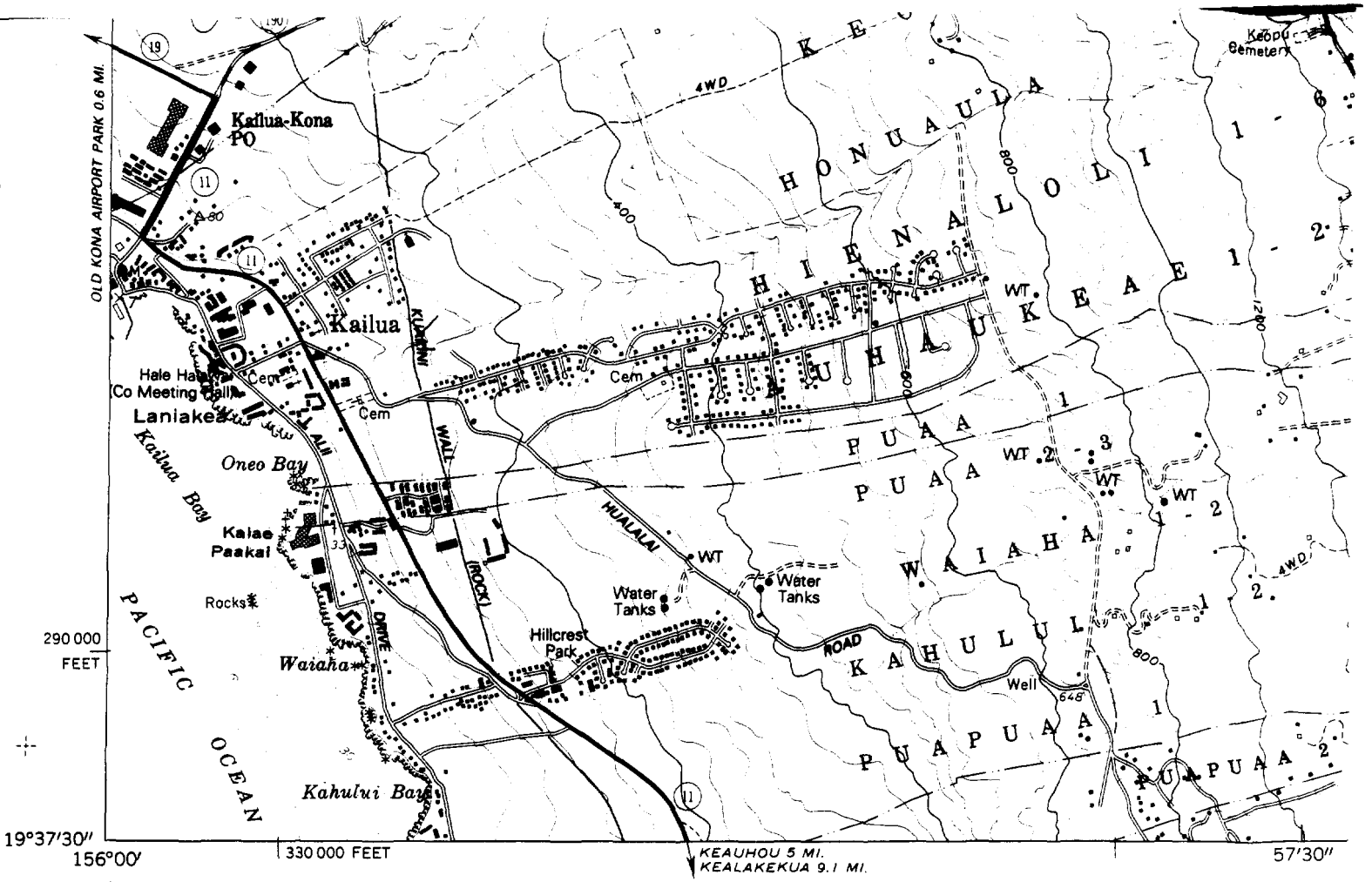
SHORELINE SHOWN REPRESENTS THE APPROXIMATE LINE OF MEAN HIGH WATER

THE RELATIONSHIP BETWEEN THE TWO DATUMS IS VARIABLE

THE AVERAGE RANGE OF TIDE IS APPROXIMATELY 1 FOOT

FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092

A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST



Mapped, edited, and published by the Geological Survey
Revised in cooperation with Hawaii Dept. of Transporation

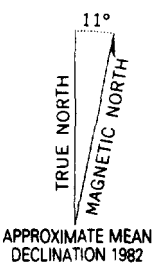
Control by USGS and NOS/NOAA

Topography by photogrammetric methods from aerial photographs taken 1954. Field checked 1959. Revised from aerial photographs taken 1977. Limited field check 1981. Map edited 1982

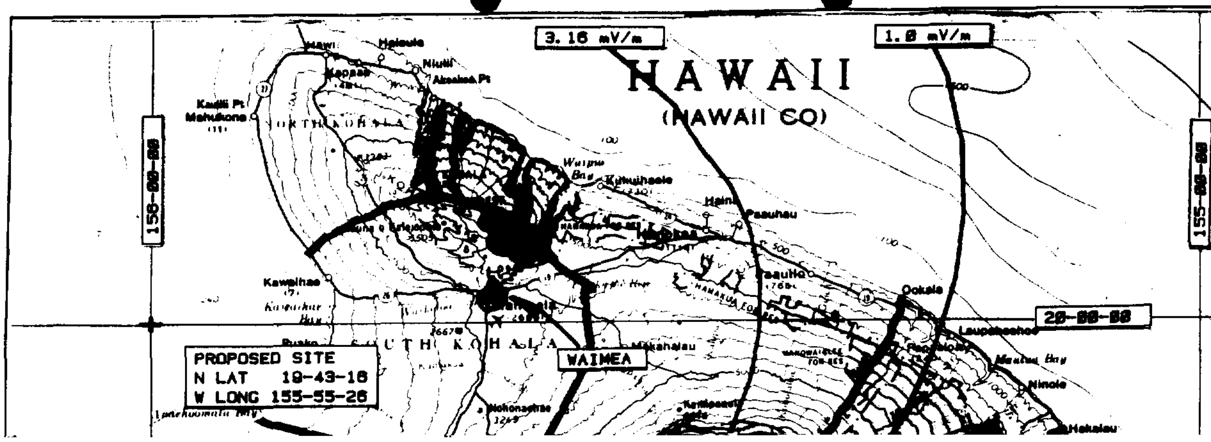
Selected hydrographic data compiled from NOS/NOAA chart 4164 (1951). This information is not intended for navigational purposes.

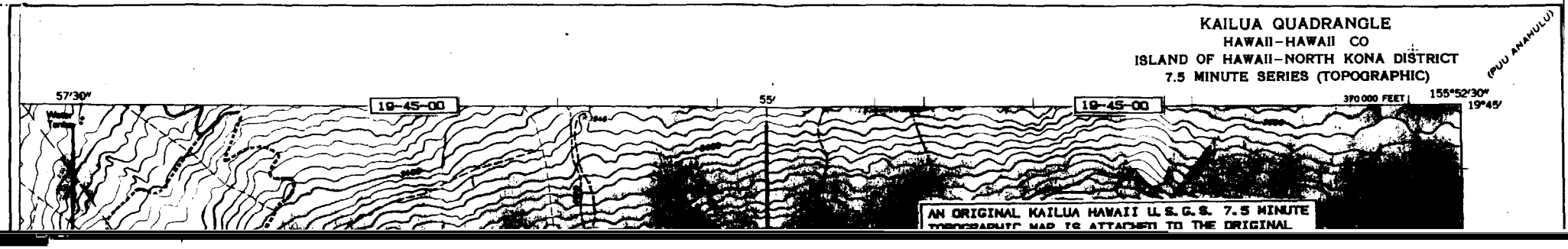
Projection and 10,000-foot grid ticks: Hawaii coordinate system, zone 1 (transverse Mercator) Clarke spheroid 1866. Old Hawaiian Datum 1000-meter Universal Transverse Mercator grid ticks, zone 5, shown in blue. International spheroid. To place on the predicted North American Datum 1983 move the projection lines 342 meters north and 291 meters west as shown by dashed corner ticks

There may be private inholdings within the boundaries of the National or State reservations shown on this map.



APPROXIMATE MEAN DECLINATION 1982


3.16 mV/m
1.0 mV/m
HAWAII
(HAWAII CO)
156-00-00
155-00-00
20-00-00
PROPOSED SITE
N LAT 19-43-16
W LONG 155-55-26
WAIMEA
Hawi
Halaula
Niulii
Mahukona
Kawaihae
Paauhau
Ookala
Ninole
Hakalau


KAILUA QUADRANGLE
HAWAII-HAWAII CO
ISLAND OF HAWAII-NORTH KONA DISTRICT
7.5 MINUTE SERIES (TOPOGRAPHIC)
(PUU ANAHULU)
57'30"
19-45-00
55'
19-45-00
370 000 FEET
155°52'30"
19°45'
AN ORIGINAL KAILUA HAWAII U.S.G.S. 7.5 MINUTE